

July 12, 2022

#### Agenda

- Chloe: SHEA Spring Conference Highlights
- Case Discussions
- Open Discussion



## SHEA Highlights

- Risk Scores
- Behavior Change Wheel
- Spellberg-isms



Let's Get Fancy with our Stewardship Interventions: Risk Scores

Hana Winders, PharmD Prisma Health-Midlands





Strengths

Locally validated

Patient-specific

May result in less broadspectrum use

May result in appropriate broad-spectrum use when needed (e.g., ESBL)

Many not locally validated

May be complicated or difficult to use

May miss patients

May lead to over-use of broad-spectrum antibiotics

Need to be updated

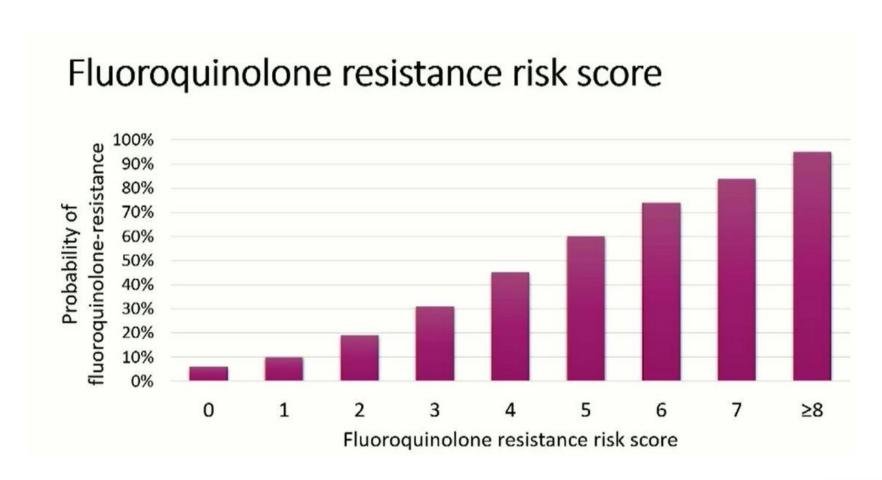
Limitations

Winders, Let's Get Fancy with our Stewardship Interventions, SHEA 2022 Spring Conference

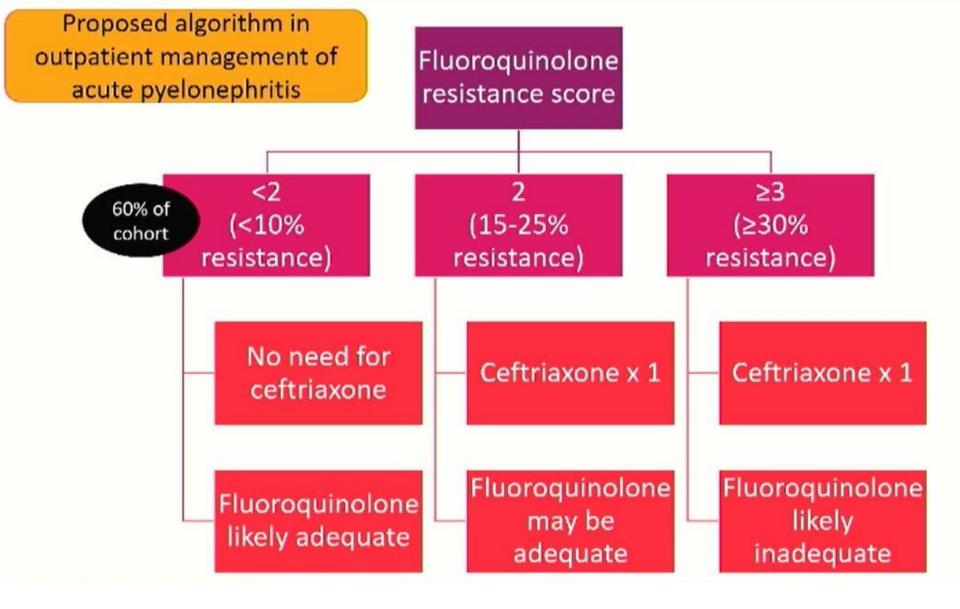


- For UTI Guidelines using a risk score to predict FQ resistance
- Case control study looking at pts with GNR bacteremia (FQ non-susceptible vs. FQ susceptible)
- In regression model, found the independent variables significantly associated with FQ non-susceptible isolates and assigned risk scores based on the OR
  - Male (1 point)
  - Outpatient GI/GU procedure in last month (2 points)
  - SNF (3 points)
  - Prior FQ use (3-5 points, depending on time-frame)

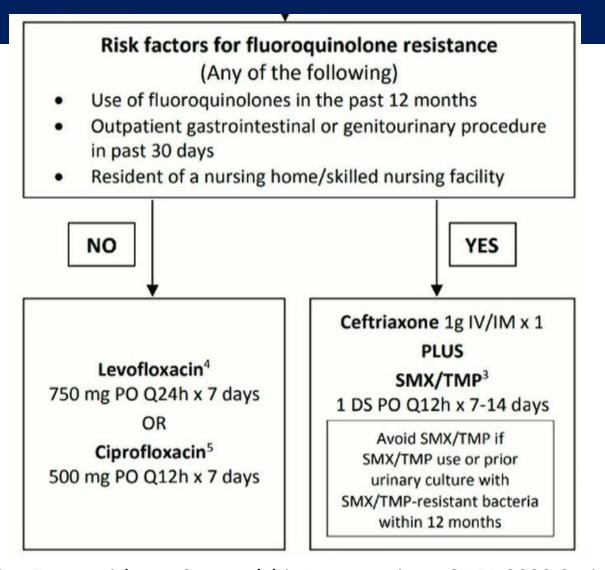












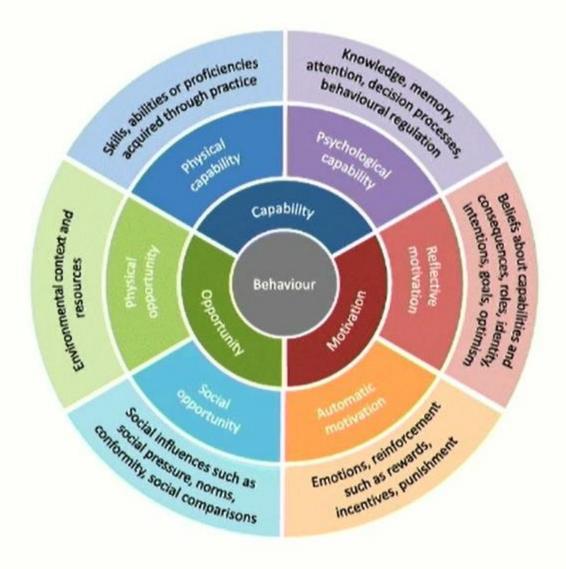


## **Behavior Change Wheel**

Big Beasts of Antimicrobial Stewardship: UTI Sonali Advani, MBBS, MPH Duke University SOM







McDonagh, et al. Application of the COM-B model to barriers and facilitators to chlamydia testing in general practice for young people and primary care practitioners: a systematic review. Implementation Sci 13, 130 (2018).



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## **Spectrum of UTI**

No UTI symptoms + negative urine culture

No UTI symptoms + positive urine culture

Non-specific symptoms, unable to express symptoms, chronic urologic issues +positive urine culture

Clear UTI symptoms, Positive Urine Culture

Barbara W Trautner, Urinary Tract Infections as a Continuum: Implications for Diagnostic and Antibiotic Stewardship, Clinical Infectious

Diseases, Volume 72, Issue 8, 15 April 2021, Pages 1339–1341, https://doi.org/10.1093/cid/ciaa280



## **Brad-Isms**

The Dogmas of Stewardship: Moving the Needle Brad Spellberg, MD

**LAC+USC Medical Center** 





## Spellberg-Isms

#### Or Is This About Fear?

- Abx are among the most potent psychoactive drugs in the pharmacopeia—they act on prescribers rather than patients
- When providers are afraid, they act instinctively, Abx sooth their fears
- This is about fear—and fear cannot be overcome by rational education
- It must be countered by psychology

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## Spellberg-Isms

#### The Psychology of Abx Prescription

Heroin Withdrawal Sign/Symptom	Antibiotic Restriction Sign/Symptom
Anger	Anger
Tachycardia	Tachycardia
Diaphoresis	Diaphoresis
Tremulousness	Tremulousness
Cursing	Cursing
Diarrhea	Diarrhea (of the mouth)
Potential Violence	Potential Violence



# Spellberg-Isms

#### **New Approaches**

Work with the psychology of fear

 Find psychological approaches to counteract overuse

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